

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-170993

(43)Date of publication of application : 14.06.2002

(51)Int.Cl.

H01L 33/00  
C01G 9/00  
C01G 15/00  
C09K 11/08  
C09K 11/55  
C09K 11/62  
H01L 21/205  
H05B 33/10  
H05B 33/14

(21)Application number : 2000-366118

(71)Applicant : SHIN ETSU HANDOTAI CO LTD

(22)Date of filing : 30.11.2000

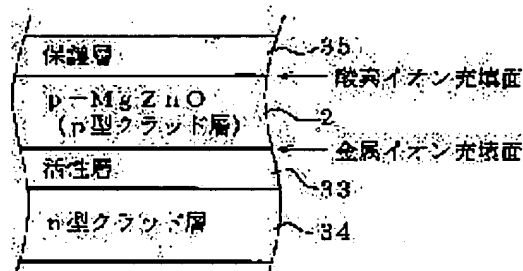
(72)Inventor : ISHIZAKI JUNYA  
YAMADA MASAHIITO

(54) LIGHT EMITTING ELEMENT AND ITS FABRICATING METHOD, VISIBLE LIGHT EMITTING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a light emitting element in which an emission layer part can be grown at a relatively low temperature using a small quantity of rare metal and high luminance emission can be ensured in blue light region and UV region.

SOLUTION: The light emitting element 1 has an emission layer part where a p-type clad layer 2, an active layer 33 and an n-type clad layer 34 are formed sequentially in this order and the p-type clad layer 2 comprises a p-type  $\text{Mg}_x\text{Zn}_{1-x}\text{O}$  layer ( $0 < x \leq 1$ ). When that layer is formed by MOVPE method, missing of oxygen can be suppressed effectively during film deposition and a p-type  $\text{Mg}_x\text{Zn}_{1-x}\text{O}$  layer having good characteristics can be obtained.



## LEGAL STATUS

[Date of request for examination]

27.10.2003

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

BEST AVAILABLE COPY

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office